Date: Tuesday, 9/4/2007 11:30:09 AM
User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	**Drawing Name**	: VALVE SEAL
Job Number	: 34412		
Estimate Number	: 12207		
P.O. Number	: N/A	**Part Number**	: D34707
This Issue	: 9/4/2007 **S.O. No.** : N/A	**Drawing Number**	: D3470 REV A
Prsht Rev.	: NC	**Project Number**	: N/A
First Issue	: N/A **Type** : SMALL /MED FAB	**Drawing Revision**	: A
Previous Run	: 28558	**Material**	: N/A
Written By	:	**Due Date**	: 10/4/2007 **Qty:** 6 **Um:** Each
Checked & Approved By	: 07.09.04		
Comment	: Est Rev: A New Issue 06-04.20 EC		

Additional Product

Job Number:

Seq. #:	Machine Or Operation:	Description :
1.0	MSIL60S063	High Temp Silicon Sheet 0.063"

Comment: Qty.: 0.0648 sf(s)/Unit Total : 0.3887 sf(s)
Material .0.063" Thick High Temp Silicone sheet
(M-SIL60S.063)
Batch: M 28853 HB 07-09-07

Seq. #:	Machine Or Operation:	Description :
2.0	WATER JET	FLOW WATER JET

Comment: FLOW WATER JET
Cut as per Dwg D
Dwg Rev: A
Prog Rev: Δ

HB 07-09-08 (30) +10 (PTO) 7

Seq. #:	Machine Or Operation:	Description :
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE

HB 07-09-07

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

Seq. #:	Machine Or Operation:	Description :
4.0	QC8	SECOND CHECK

Comment: SECOND CHECK

EN 7/09/10

Seq. #:	Machine Or Operation:	Description :
5.0	PACKAGING 1	PACKAGING RESOURCE #1

Comment: PACKAGING RESOURCE #1
Identify and Stock
Location: S7 97

7/8/10 (40)

Form: rprocess

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes (No) **DQA:** [signature] **Date:** 07/09/07

QA: N/C Closed: _____ **Date:** ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
			Corrective Action Section B						
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector
07/09/07	4 20	10 parts have the 0.116" hole at 0.125"	[initials]	Acceptable	[initials] 07-09-07	[initials] 7/09/07	[initials] 07.09.07	[initials] 07/09/07

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevD

Date: Tuesday, 9/4/2007 11:30:09 AM
User: Kim Johnston

Process Sheet

Customer:	CU-DAR001 Dart Helicopters Services	**Drawing Name:**	VALVE SEAL
Job Number:	34412	**Part Number:**	D34707

Job Number:

Seq. #:	**Machine Or Operation:**	**Description :**
6.0	QC21	FINAL INSPECTION/W/O RELEASE

HO

Comment: FINAL INSPECTION/W/O RELEASE

07/09/11

Job Completion

07-09-11

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** __________

QA: N/C Closed: _____ **Date:** __________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	34412
Description: Butterfly Valve Seal	Part Number:	D3470-7
Inspection Dwg: D3470 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

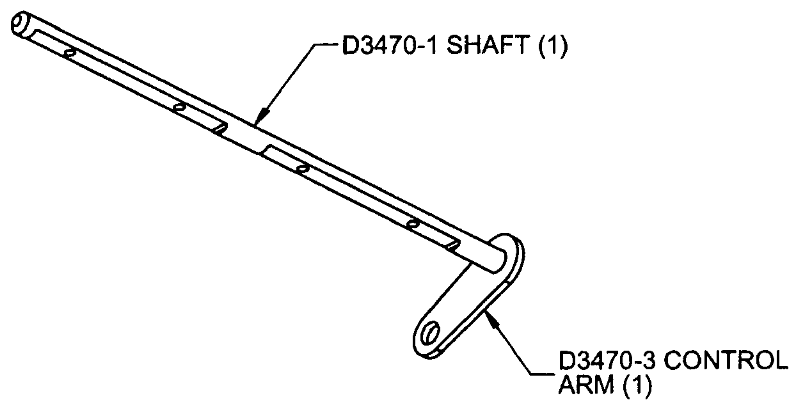
[X] First Article [ ] Prototype

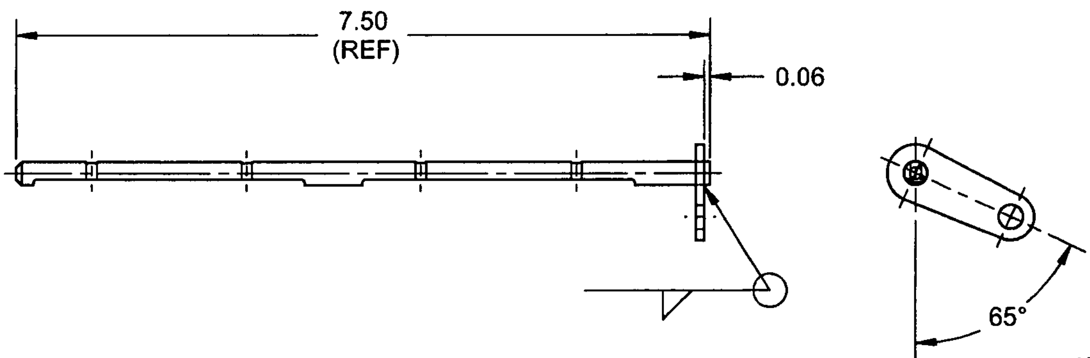
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.85	+/-0.010	2.84	X			
3.18	+/-0.010	3.17	X			
1.680	+/-0.010	1.68	X			
Ø0.116	+0.004/-0.001	.116	X			
0.840	+/-0.010	.840	X			

Measured by:	HB	Audited by:	Er	Prototype Approval:	N/A
Date:	07-09-07	Date:	7/09/10	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.10.05	New Issue	KJ/JLM	

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3470	REV. A SHEET 1 OF 4
DATE 05.12.14		TITLE SHUT-OFF VALVE SHAFT	SCALE 1:2
A	05.12.14	NEW ISSUE	





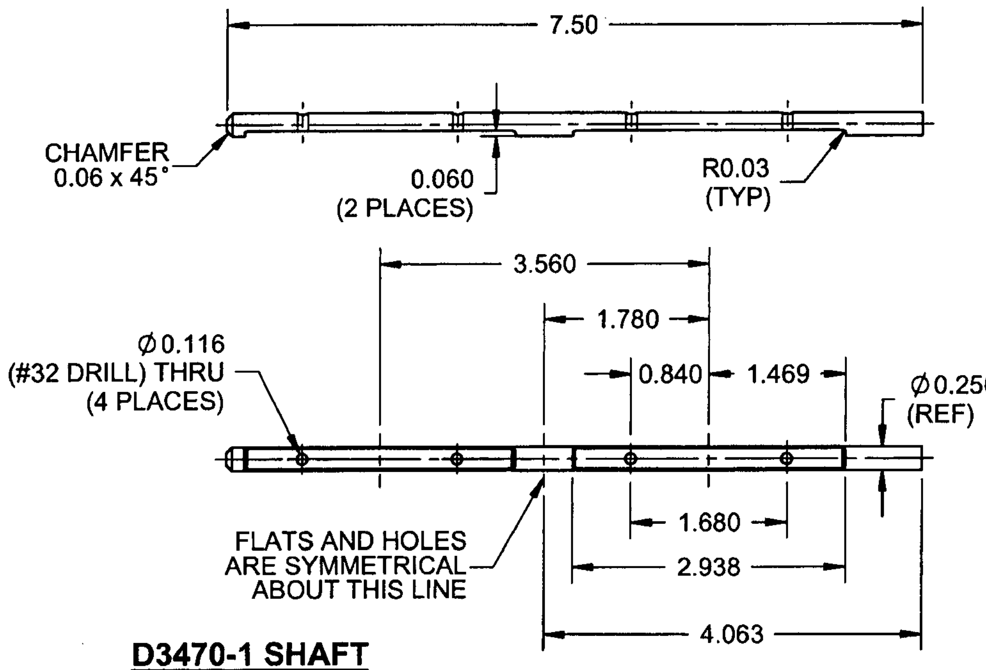
D3470-041 SHUT-OFF VALVE SHAFT

NOTES:

1) WELD PER DART QSI 004
2) FINISH: NONE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

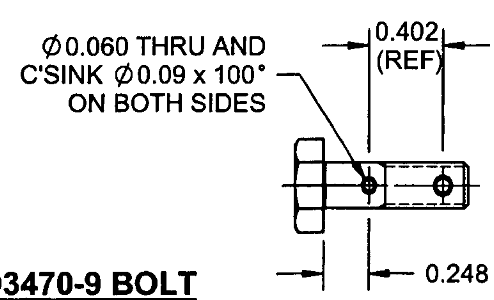
QTY -041	P/N	DESCRIPTION
X	D3470-041	SHUT-OFF VALVE SHAFT
1	D3470-1	SHAFT
1	D3470-3	CONTROL ARM

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3470	REV. A SHEET 2 OF 4
DATE 05.12.14		TITLE SHUT-OFF VALVE SHAFT	SCALE 1:2



D3470-1 SHAFT

1) MATERIAL: AISI 303 STAINLESS STEEL 0.25 ROUND BAR (REF. DART SPEC. M303R0.250)



D3470-9 BOLT
SCALE 1 : 1

1) MAKE FROM AN4-6 BOLT

NOTES:

2) FINISH: NONE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

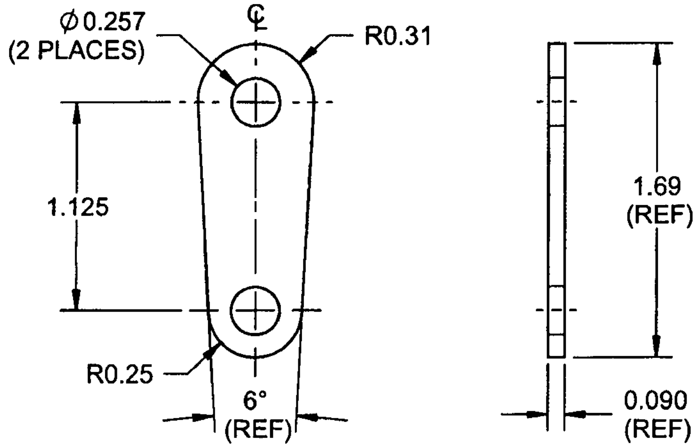
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3470 REV. A SHEET 3 OF 4
DATE 05.12.14		TITLE SHUT-OFF VALVE SHAFT SCALE 1:1

DART

06.04.03

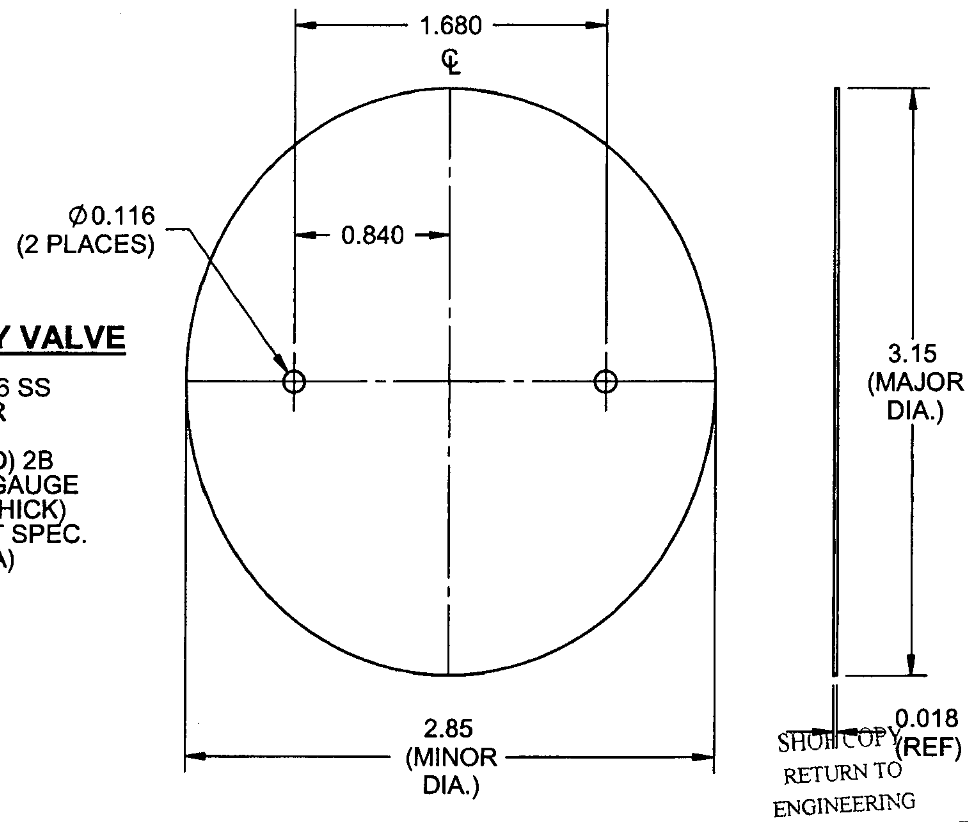
D3470-3 CONTROL ARM

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 13 GAUGE SS (0.090 THICK) (REF. DART SPEC. M304S13GA)



D3470-5 BUTTERFLY VALVE

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)



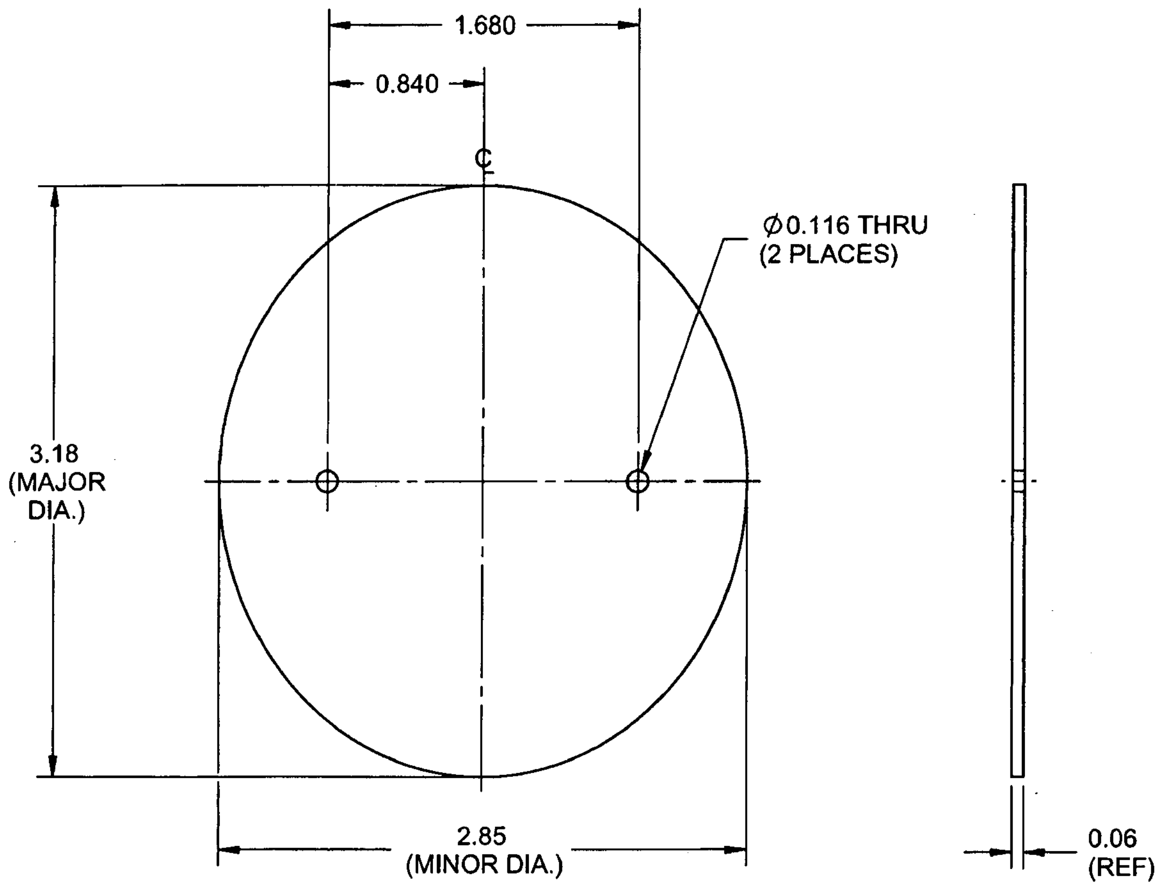
SHOP COPY
RETURN TO ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT WITHOUT NOTICE
WORK ORDER NO. 3442

NOTES:

2) FINISH: NONE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3470 — REV. A — SHEET 4 OF 4
DATE 05.12.14		TITLE SHUT-OFF VALVE SHAFT — SCALE 1:1



RELEASED 06.04.03

D3470-7 BUTTERFLY VALVE SEAL

NOTES:

1) MATERIAL: RED (OR GRAY) 60 DUROMETER HI-TEMPERATURE SILICONE SHEET, 0.063 THICK (REF. DART SPEC. M-SIL60-S.063)
2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
3) ALL DIMENSIONS ARE IN INCHES
4) BREAK ALL SHARP EDGES 0.005 TO 0.010